

t20_sgraph1
(TMN7FbQMYc4EYPtkexdYBTdgo9UFBNgCJCZ)

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Let $m1_sgraph1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u1_sgraph1 : \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0. \forall X1. (m1_sgraph1 X1 X0) \Rightarrow (\forall X2. \neg (X2 \in u1_sgraph1 \\ X1) \wedge (\forall X3. \forall X4. \neg (X3 \in u1_struct_0 X1) \wedge ((X4 \in u1_struct_0 \\ X1) \wedge ((X3 \neq X4) \wedge (X2 = k2_tarski X3 X4)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. \forall X2. (X2 = k2_tarski X0 X1) \Leftrightarrow (\forall X3. \\ (X3 \in X2) \Leftrightarrow ((X3 = X0) \vee (X3 = X1))) \end{aligned} \quad (2)$$

Theorem 1

$$\begin{aligned} \forall X0. \forall X1. (m1_sgraph1 X1 X0) \Rightarrow (\forall X2. \forall X3. \\ (k2_tarski X2 X3 \in u1_sgraph1 X1) \Rightarrow ((X2 \in u1_struct_0 X1) \wedge ((X3 \in u1_struct_0 \\ X1) \wedge (X2 \neq X3)))) \end{aligned}$$